

# VEHICLE ENERGY STORAGE SYSTEM CONTROL METHODS AND METHOD FOR DETERMINING BATTERY CYCLE LIFE PROJECTION FOR HEAVY DUTY HYBRID VEHICLE APPLICATIONS

## Abstract

A method for equalizing a storage parameter for a vehicle energy storage system having one or more energy storage banks associated therewith includes identifying a quiescent period of operation for the vehicle, and determining whether the value of a defined storage quantity for a first energy storage bank differs from the value of said defined storage quantity for a second energy storage bank by a threshold amount. During the quiescent period of operation, one of said first and second energy storage banks is discharged and the other of the first and second energy storage banks is charged. The one of the first and second energy storage banks corresponds to the bank having the value of the defined storage quantity exceeding the value of the defined storage quantity of the other of said first and second energy storage banks.